

# Project Leader's Report

March - 2003



USDA Forest Service - Southern Research Station - 320 Green Street Athens GA 30602 - <http://www.srs.fs.fed.us/disturbance>



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## Technology Transfer :

• Ken Outcalt and Joe O'Brien attended the meeting of principal investigators for the Joint Fire Science Program. Outcalt presented two posters; the first was co-authored with Dale Wade and Sandra Rideout and was entitled "Long-term dormant-season burning interval study in the Palmetto/Gallberry fuel complex." The second poster presented by Outcalt was co-authored with Dale Wade and was entitled "Frequency and season of prescription fires to reduce hazardous fuel loads on the Lower Piedmont of Georgia."

• Scott Goodrick, Yongqiang Liu, and Gary Achtemeier attended the Workshop on Wildland Fire Modeling and Prediction in the Southeast United States, held at Florida State University Center in Tallahassee, FL. The unit co-sponsored the event. Approximately 50 people from around the world came to Tallahassee to present the state of the art wildland fire modeling and discuss

end user needs and future directions in model development. Some of the key presentations included talks by unit scientists. Scott Goodrick presented a discussion of "High-Resolution Weather Modeling for Forestry in the Southeast" and was a co-author of several other talks: "Effects of Vegetation Drag and Fuel Type on Fire Spread Using a Physics-Based Model" by Chunmei Xia, M. Y. Hussaini, Philip Cunningham (School of Computational Science and Information Technology, Florida State University), Rodman Linn (Los Alamos National Laboratory), and Scott Goodrick; "Vorticity Dynamics of Plumes in a Cross Flow" by Philip Cunningham, M. Y. Hussaini (School of Computational Science and Information Technology, Florida State University), Scott Goodrick (USDA Forest Service), and Rodman Linn (Los Alamos National Laboratory). Gary Achtemeier presented a paper entitled "High resolution weather modeling and forestry smoke: the potential for new problems to solve."

## Outreach Activities:

• Ten groups with a total of 129 people toured the Brender Forest during the month of March. These groups included the University of Georgia advanced silviculture class, Statewide Human Resources Specialists, a Bird Census Training Class from the Department of Natural Resources, a GPS Training class from the Georgia Forestry Commission, and seven environmental science outdoor labs held by Mercer University..

• Approximately 75 hunters took part in the first weekend of turkey hunts in March on the Brender Experimental Forest; 92 people hiked the Hitchiti Trail and 30 people visited the office for information.

• John Moore represented Brender Forest at the Macon Cherry Blossom Festival, and worked with an estimated 100 young people and adults, demonstrating how paper is made.

• The Piedmont and Appalachian Team was featured in Hendersonville, NC Times-News, as well as on television in Asheville, in coverage of a prescribed burn in western North Carolina.

*Continued p.2*

# Continued Outreach Activities:

*Continued*

• Edward Andrews, forester at Athens, attended the celebration marking the accreditation of Alabama A&M University (AAMU) by the Society of American Foresters. In July 2002, AAMU became the first Historically Black College or University (HBCU), and thus the first 1890 Land Grant Institution, to be accredited by a professional forestry association. This occasion is momentous because it opens doors that were previously closed to many African-American professionals. AAMU has graduated more African-American foresters in the past five years than all other universities combined. This event was celebrated on March 17<sup>th</sup> and 18<sup>th</sup> on AAMU campus. Edward joined Mark Rey (Under-Secretary of Agriculture), Chief Dale Bosworth and Associate Deputy Chief Gloria Manning, George O' Brien (Vice President, International Paper), Pete Roussopoulos (Southern Station Director), Sam Foster (Dean, School of Forestry at Mississippi State University), Alabama State Forester Tim Boyce, and Huntsville Mayor Loretta Spencer. Thanks to all of these wonderful people, Alabama A&M University is rising to higher heights.

• Scott Goodrick gave an invited presentation on SHRMC and fire weather to the Florida State Student Chapter of the American Meteorological Society.

• Scott Goodrick attended the meeting of the Southern Fire Weather and Fire Danger Working Team and made a presentation on SHRMC.

• Ralph DiCosto attended the 225th American Chemical Society International Meeting, held in New Orleans, LA. Ralph presented a paper entitled "Nitrogen-15 CPMAS nuclear magnetic resonance spectroscopy and biological stability of soil organic nitrogen in whole soil and particle-size fractions." Other presentations focused on the use of spectroscopy and stable isotope measurements to unravel the behavior of ecologically significant organic compounds in soil. Tim Filley presented the use of lignin monomers to distinguish the soil carbon inputs of angiosperms, gymnosperms, and herbaceous plants. Sylvie Derenne described how to differentiate microbial versus plant-derived lipids in soil. "Ultralaminae" (hydrophobic coatings that may preserve otherwise decomposable soil organic material) was proposed by Eric Lichtfouse on the basis of image and chemical evidence. Richard Evershed presented isotopic evidence that collembolan (millimeter-sized soil insects), often thought of as fungivorous, consume nematodes.

• John Stanturf was invited to serve on the Scientific Committee for the IUFRO Conference on the Question of Conversion of Coniferous Forests, to be held at the University of Freiburg in Breisgau, Germany on 27 September to 2 October 2003.

• Stanturf has initiated a cooperative research project with Graeme Lockaby at Auburn University on "Urbanization effects on soil carbon sequestration across a forested landscape: An integrated approach."

• Ken Outcalt led a field trip for attendees of the annual meeting of the Society for Ecological Restoration International Coastal Plains Chapter to the Hitchiti Experimental Forest on March 1, to view long-term burning plots. They also traveled to the Piedmont National Wildlife Refuge to view time-of-year burning studies. Other Forest Service presenters included John Moore, David Combs and Tom Philipps.



*Introduction to Hitchiti by John Moore*

• Ken Outcalt gave a tour of the long-term burn plots and 1998 Florida wildfire plots on the Osceola National Forest on March 21st for Dr. Alan Long and his class of 20 seniors from the University of Florida School of Forest Resources and Conservation.



*Discussing Florida '98 Wildfire plots on the Osceola National Forest.*



There is always a choice about the way you do your work, even if there is not a choice about the work itself.

-Stephen C. Lundin



*Fires were ignited by hand in sensitive areas where fire intensity could become too high.*



*Local television and newspaper reporters were on hand to describe the fire to the public.*

- On March 12 and 13, the Piedmont and Appalachian Team assisted the North Carolina Wildlife Resources Commission in conducting prescribed burns on the Green River Game Management Land in Polk County, North Carolina. The prescribed burns complete the installation of treatments on the Appalachian site of the National Fire and Fire Surrogate Study. A total of approximately 400 acres was burned over the two days in steep mountainous terrain. A helicopter crew from the Croatan National Forest helped to ignite the burns. News media from the ABC television affiliate in Asheville, NC and the Hendersonville, NC newspaper were on hand to describe the burns. Both Helen Mohr and Tom Waldrop were interviewed for television and appeared on the evening news broadcast. The burns were successful and will help to provide an understanding of how fuel reduction treatments impact numerous components of Appalachian ecosystems.



*A helicopter was used to ignite prescribed fires on this steep terrain.*

## Meetings / Reports :

- An administrative team led by Jay Hundley made a Functional Assistance Visit to Athens. Stanturf and Janet Revell and representatives of the other RWUs in Athens met with the team. Team members also met with unit staff and provided information and training.
- Gary Achtemeier and John Stanturf met with Al Riebau, Air Resources National Program Leader, Forest Service R&D Washington Office staff and discussed National Fire Plan funding prospects and meteorological, climatological, and atmospheric science research needs and opportunities.
- The Station has scheduled an All Scientists Meeting for March 2-4, 2004; location to be announced but expect Atlanta.
- Division 1, Silviculture, of IUFRO has scheduled an all-division meeting for June 21-25, 2004. The conference will be held in Montpellier, France and hosted by CIRAD-Foret.
- Corey Babb and Ralph DiCosty visited Wick Johnson of the Soil, Plant, and Water Analysis Laboratory (Cooperative Extension Service, University of Georgia). Johnson shared his knowledge and experience in using the "Mehlich 1" soil extraction and plasma spectrometry

to rapidly measure levels of plant-available phosphorus, potassium, calcium, and magnesium in soils. This procedure is applicable to acid soils with low-activity clays, and will be utilized in the Unit's Soil Quality Laboratory on numerous soils from the Southeast.

- Cynthia Fowler attended the "Humans, Fire, and Forests: Social Science Applied to Fire Management" held in Tucson, AZ in January. Northern Arizona University and the Ecological Restoration Institute sponsored this workshop. Fire scientists discussed current and ongoing research and needs for future research. In addition to open discussions among the approximately 30 attendees, smaller groups assembled to discuss the state of our knowledge on the relationships between individuals, communities and fire.

- On March 27, Mac Callaham sat on the advisory committee for Mike Vickers, graduate student in the Clemson Entomology Department, who successfully defended his Master's Thesis Project. Mike's project was focused on spiders and their responses to experimental treatments in Tom Waldrop's Fire and Fire Surrogate Plots on the Clemson Experimental Forest. Congratulations to Mike from everyone at RWU-4104.

- On March 28, Callaham visited International Paper's Southlands Research Forest near Bainbridge, GA, to discuss potential research collaborations with Masato Miwa and others involved in a study examining effects of streamside management zones on hydrology and biota in harvested watersheds.

- Boyd Edwards participated in the March 6 planning meeting that confirmed topics and speakers for the 2003 Agroforestry Field Day to be held on September 18, in Griffin, GA.

- Tom Waldrop met with Dr. Rocky English of Clemson University on March 24 to discuss cooperative research plans. The two will collaborate on a study of the impacts of prescribed burning to insect diversity in streams of the Southern Appalachian Mountains. Members of the Piedmont and Appalachian Team assisted Dr. English and his graduate students in selecting appropriate study sites in watersheds scheduled to be burned on the Tallulah Ranger District. Burns are planned for the first week of April.

- Tom Waldrop, Sandra Rideout, and Shane Welsh met with Leon Konz of the Great Smoky Mountains National Park and Scott Terry of the Clemson University, Strom Thurmond Institute to discuss plans for collecting hyperspectral images for Waldrop's research on fuels classification. Hyperspectral images will be made of mountainous areas on the Andrew Pickens Ranger District, Sumter National Forest; Tallulah Ranger District, Chattahoochee National Forest; Nantahala Ranger District, Pisgah National Forest; and the Great Smoky Mountains National Park. Waldrop is

developing a fuels classification scheme for the Appalachian Mountains based on landscape variables such as slope position, aspect, and disturbance history. Terry will use data from hyperspectral images to determine if this technology can be used by Waldrop to detect fuel categories. If this system works, it can become a valuable tool for mapping fuels and predicting fire behavior.

- Safety Alert – Prescribed burning can be hazardous even after the fires are out. The Piedmont and Appalachian Team learned from a freak accident that this fact is especially true when burning in hardwood stands. At the conclusion of a prescribed burn in North Carolina, team members were outside of the burn unit and packing their vehicles to leave. A sudden ear-splitting scream from Helen Mohr warned everyone else that a tree was falling toward them. The crown of the large southern red oak hit a truck but all personnel were safe. This tree was hollow at the base and burned through from the inside until it fell.



*This hollow tree burned from the inside out until it fell on a RWU truck. No injuries occurred.*

- Susan Fox and Jennifer O'Connor visited Stanturf and discussed LMAV proposal and the upcoming Southern Leadership/Dean's Tour arrangements.

- Al Riebau, WO visited the unit and traveled to Tallahassee with Gary Achtemeier and Scott Goodrick to attend the Wildland Fire Modeling workshop.

- Dr. Berry Schiver, University of Georgia, and his graduate students, visited Brender Forest in March and met with Dr. Boyd Edwards to look at possible additional research on his regeneration and site preparation studies.

- Daniel Markewitz (University of Georgia, Forest Management Program) toured the Unit's Soil Quality Laboratory at the invitation of Ralph DiCosty. Markewitz, DiCosty, and Corey Babb discussed the use of rapid methods to determine soil nutrient levels. Markewitz will be sending soil samples to the laboratory for carbon and nitrogen analysis as part of an interlaboratory quality control study.

- Mac Callaham hosted Dan Richter of Duke University at Clemson University for a one-day consultation/workshop on soil invertebrate identification on March 6.

*Please open up  
your physics book*



*Limbs hit the truck and bounced off, leaving moderate damage.*

*and look up  
Newton's Laws*



## Personnel News :

• Welcome to Dr. Cynthia Fowler, Research Ecologist, who joined the unit this month. Dr. Fowler is an Ecological Anthropologist by training (University of Georgia, University of Hawaii) and will be responsible primarily for writing and editing the Fire Encyclopedia. Cynthia will be located at the lab in Athens.



• Stephanie Pratt has joined the Athens lab staff as a student worker, assisting Ken Outcalt with sample processing from the Fire and Fire Surrogates studies (FFS).

• Brett Miley has resigned from the position of Forestry Technician at Savannah River to pursue other interests.

• Interviews were held for the Tech Transfer Specialist position. A selection will be made by April 15<sup>th</sup>.

• The Disturbance Ecology of Southern Appalachian and Piedmont Ecosystems Team was recognized by the Joint Fire Science Program for having the most productive project. The award was presented on March 11 at the annual meeting of Principal Investigators in Phoenix, Arizona. The selection was based on publications, presentations, posters, tours, and graduate student support.



*Dr. Cynthia Fowler at her new office.*

## News from around the Region :

• Arnett Mace was named Senior Vice-President and Provost at the University of Georgia. Mace was Dean of the Warnell School of Forest Resources. Mace has been serving as interim Provost for the last six months and received the nod from President Michael Adams after a national search. Before coming to UGA as Dean in 1991, Mace was Director of the University of Florida School of Forest Resources and Conservation.

• Marvin Hoover, former watershed researcher with the Southeastern Forest Experiment Station, died February 8, 2003 in East Wenatchee, WA. Hoover was with the SE Station from 1940 to 1954, at the Coweeta Lab in North Carolina and in Union, South Carolina before moving to the Rocky Mountain Forest and Range Experiment Station. A more complete obituary can be found in CSA News (Crop-Science-Soil Science-Agronomy News).

• David Cleaves named by the Chief as director of resource valuation and use research for the agency. Forest products, economics, recreation, urban forestry and social science are the focus areas for this research. Cleaves is currently the national program leader for fire systems research. Cleaves has a bachelor's and master's in forest management from Michigan State University and a doctorate in economics from Texas A&M University. He was formerly a Forest Service research project leader in fire economics and management and a professor of forest economics at Oregon State University. He will assume his new responsibilities immediately.

• Graeme Lockaby, Auburn University, has been chosen as recipient of the Environmental Law Institute's National Wetlands Award in Science Research for 2003. The award recognizes Lockaby's contributions to the science underlying wetlands protection.

• The School of Forestry and Wildlife at Auburn has postponed the search for Associate Dean. The position has been open since George Bengston retired. Greg Somers has been named Interim Associate Dean for Teaching and Graeme Lockaby for Research.

• Great Smoky Mountains National Park is completing a 1,034-acre yellow pine restoration burn, the largest prescribed burn in the Park's history. The Arbutus Ridge Burn is located near Cades Cove, one of the most visited parts of the Smokies. The burn area was historically a forest community with yellow pine dominant in the overstory, a condition maintained in pre-settlement days by periodic fire. Changes in land management have become evident through changes in the stand structure, which is now a hardwood-dominant, closed-canopy forest. These changes have trickled down to all levels of the forest system. The Arbutus Ridge Burn is expected to significantly reduce some shade tolerant plants that directly compete with the pines for space and sunlight.

*Check out our Website at*

*<http://www.srs.fs.fed.us/disturbance>*

*Also new presentations will be posted on the smoke management website:*

*<http://www.srs.fs.fed.us/smoke>*

- International Paper Co plans to sell about 1.5 million acres of timberland in the southern United States over the next five years through its subsidiary Blue Sky Timber Properties LLC, a unit of Southeast Timber. International Paper has sold billions of dollars in assets over the last few years in an effort to raise cash and pay down debt. The company currently owns about 9 million acres of forest land in the United States. (Reuters)

- Big mergers in the U.S. paper and wood industry, which have not been seen since the start of the U.S. economic downturn, may make a comeback on a broader, more global scale, industry executives and analysts say. The forest products industry went through a wave of consolidation between 1999 and 2001, cutting capacity to counter falling prices and demand. The rate of paper industry mergers slowed dramatically as market conditions worsened, but executives are keeping their options open with an eye on recovery. John Dillon, CEO of International Paper said he would consider European acquisition opportunities. Jukka Harmala, CEO of Finnish-Swedish Stora Enso, said he is looking at expansion in North America, as antitrust barriers prevent most of the company's possible European acquisitions. "There are several transatlantic mergers that would make sense," IP's Executive Vice President James Melican told *Dagens Industri*, a Swedish business journal. "I think something will happen in the next few years." International Paper competes with companies such as Finnish-Swedish Stora Enso—the biggest paper and board producer in volumes — and U.S. Weyerhaeuser and Finland's UPM-Kymmene. Melican said all of these

companies wanted to lead consolidation. "I think everyone will want to choose their dance partner and not just be the ones left over," Melican said. He said that in the future U.S. companies would be more active than European ones in mergers and acquisitions. "Development is going into a direction where there will be less than half a dozen forest industry companies operating around the world," Melican said. While executives said they see possibilities for transatlantic mergers, they also noted that the challenges facing such deals far outstrip those of domestic mergers. "With an international merger, in most cases, you need to have a duplicate set of management functions, so one has to be quite careful about what you pay for a company given the synergies would be lower," said Weyerhaeuser CEO Steven Rogel. Unfavorable conditions in the U.S. forest products industry are likely to keep major deals on hold as companies struggle to cut costs to offset slack demand and weak pricing. Still, after years of aggressively streamlining costs, the industry is poised for a recovery after the war in Iraq is over and energy prices fall back to normal levels. (Reuters)

- Prudential Timber Investments Inc. (PruTimber) has launched a program to acquire a diversified portfolio of pine plantation investments in the Southern

Hemisphere, beginning with the acquisition of about 26,328 acres of planted pines in the state of Parana, Brazil on behalf of an investor. PruTimber is a business of Prudential Real Estate Investors, the real estate investment and advisory business of Prudential Financial, Inc. PruTimber will manage the investment over the plantation's expected life of 7 to 10 years. In Brazil, sustainably managed pine plantations supply an expanding manufacturing base that produces such wood products as lumber, panels and furniture, as well as pulp, paper and packaging. Much of Brazil's forest sector output is consumed domestically, but exports to Asia, North America and Europe are expanding as production capacity grows. (Business Wire).

- Kinko's, Inc. announced a new forest-based product procurement policy incorporating a strict set of vendor requirements and establishing a central set of recycled content standards. Kinko's new vendor requirements are believed to be the first time a company has 1) incorporated firm guidelines for the forest management practices of its suppliers and 2) engaged both its vendors and the environmental community to ensure that the company is not aligning itself with suppliers that are logging or distributing products from old

#### GPRA Accomplishments:

Category	FY 2002 Total	FY 2003 To Date
Number of Refereed Journal Publications	9	7
Number of Non-Refereed Publications (include abstracts)	53	13
Number of Publications (refereed + non-refereed)	62	20
Number of Tours	46	45
Number of Short Courses/Training	8	8
Number of Invited Presentations to Scientific Organizations	6	5
Number of Invited Presentations to Lay Organizations	25	34
Volunteer Presentations to Scientific Organizations (non-GPRA)	28	19
Number of Technology Transfer Activities (other than above)	172	91
Outside Funding	\$3,227,500	\$47,563



## Publications :

growth or endangered forests, converting native forests to tree plantations, or using genetically modified organisms. In addition, suppliers must guarantee and document that none of their supply sources or operations result in the logging of old growth or endangered forests. These requirements expand on Kinko's six-year-old policy of not knowingly purchasing any paper or wood products that are derived from the harvesting of old-growth, endangered or high-conservation value forests. (PR Newswire)

- Hancock Timber Resource Group will acquire the approximately 104,000-acre Snoqualmie Tree Farm from Weyerhaeuser Company for a purchase price of \$185 million. Weyerhaeuser announced in January 2002 that it intended to sell the Snoqualmie Tree Farm to the Evergreen Forest Trust. The Trust planned to finance the transaction with tax-exempt bonds, which required congressional approval. The Trust was unable to gain that approval within the one-year period specified in the purchase and sale agreement. Following the sale, Weyerhaeuser will own or manage approximately 1.2 million acres of timberland in Washington. Upon completion of the deal, Hancock Timber will manage approximately 420,000 acres of timberland in the Northwest, including approximately 230,000 acres in Washington State. (Business Wire)

**FY 2003** (\* denotes new publication this month)

- Escalante Fernandez, R. Monreal Rangel, S., **Stanturf, J.**, Arseneau, C., Nantel, P. 2002. Forest plantations in North America. Report to the North American Forestry Commission. 26 pp.
- Glitzenstein, J.S., Streng, D.R., and **Wade, D.D.** 2003. Fire frequency effects on longleaf pine (*Pinus palustris* P. Miller) vegetation in South Carolina and Northeast Florida, USA. *Natural Areas Journal* 23:22-37.
- Hanula, J.L., **Wade, D.D.** 2003. Influence of long-term dormant-season burning and fire exclusion on ground-dwelling arthropod populations in longleaf pine flatwoods ecosystems. *Forest Ecology and Management* 175 (1-3): 163-184.
- \***Kennard, D.K., K. Outcalt**, and M. Carrington. 2002. *Serenoa repens* (Bartr.) Small saw palmetto. In: J.K. Francis (ed.) *Wildland shrubs of the United States and its territories*. Gen. Tech. Rep. IITF-WB-1. Published on website [www.fs.fed.us/global/iitf/wildland\\_shrubs.htm](http://www.fs.fed.us/global/iitf/wildland_shrubs.htm). 3 p.
- Lockaby, B.G., B.D. Keeland, **J.A. Stanturf**, M.D. Rice, G. Hodges, R.M. Governo. 2002. Arthropods in decomposing wood of the Atchafalaya River Basin. *Southeastern Naturalist* 1(4): 339-352.
- Moody, J.M.** 2002. Fire and alternative fuel treatment effect on soil Nitrogen: A case study of Myakka River State Park. M.Sc. thesis, FL A&M Univ., Tall., FL. 52 p.
- Rideout, S.** and Oswald, B.P. 2002. Effects of prescribed burning on vegetation and fuel loading in three east Texas state parks. *Texas J. Science* 54(3): 211-226.
- \***Stanturf, J.A.**, Kellison, R.C., Broerman, F.S., and Jones, S.B. 2003. Productivity of southern pine plantations: Where are we and how did we get here? *Journal of Forestry* 101 (3): 26-31.
- Stanturf J.A.** and Madsen P. 2002. Restoration concepts for temperate and boreal forests of North America and Western Europe. In: *Forest Ecosystems: Ecology, Conservation and Sustainable Management* (eds. Jiang Z., Centritto M., Liu S. & Chiatante D.). *Plant Biosystems* 136, 143-158.
- Stanturf, J.A., Wade, D.D., Waldrop, T.A., Kennard, D.K., and Achtemeier, G.L.** 2002. Fire in Southern Forest Landscapes. P. 607-630 (Chapter 25) In Wear, D.M. and Greis, J.G., editors, *Southern Forest Resource Assessment*. Gen Tech Rep. SRS-53. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station.



## Upcoming Events :

<b>2003</b>		<b>Jul 20-24</b>	10 <sup>th</sup> North American Forest Soils Conference, Sault Ste. Marie, Ontario, Canada; Stanturf, Callaham to attend and present posters. <a href="http://www.fs.fed.us/forestsoilsconference">http://www.fs.fed.us/forestsoilsconference</a> .
<b>Apr 7-11</b>	Geospatial 2003, Putting Geospatial Information to Work. Colorado Springs, CO <a href="http://www.fs.fed.us/gstc/fsgeospatial/">http://www.fs.fed.us/gstc/fsgeospatial/</a>	<b>Aug 11-14</b>	IUFRO Working Group for Seed Physiology and Technology conference to be held at the Georgia Center, Athens, GA.
<b>Apr 21-23</b>	Dean's Tour to be held in at the University of Georgia in Athens, Georgia.	<b>Sep 7-10</b>	Council on Forest Engineering annual meeting, Bar Harbor, ME; <a href="http://www.forest-resources.umaine.edu/nercofe/cofe2003.htm">http://www.forest-resources.umaine.edu/nercofe/cofe2003.htm</a>
<b>Apr 23-25</b>	IUFRO Conference on Decision Support for Multiple Purpose Forestry: A Transdisciplinary Conference on the Development and Application of Decision Support Tools for Forest Management, Vienna, Austria; Kennard to attend and present.	<b>Sep 16-18</b>	IUFRO Conference on 'Strong Winds and Trees: ecology and management, sponsored by WP 8.08.02 and University of Karlsruhe, Germany; re-scheduled from Aug 17-24 in Zurich; <a href="http://www.ifh.uni-Karlsruhe.de/ifh/science/aerodyn/windconf.htm">http://www.ifh.uni-Karlsruhe.de/ifh/science/aerodyn/windconf.htm</a> .
<b>*May 11-14</b>	Annual meeting, Soil Ecology Society, "Invasive Species and Soil Ecology," Palm Springs, CA; Callaham to attend and present paper <a href="http://www.ccb.ucr.edu/SES/SES2003meeting.html">http://www.ccb.ucr.edu/SES/SES2003meeting.html</a>	<b>Sep 18</b>	Agroforestry and Wildlife Field Day, Griffin, GA
<b>May 11-16</b>	Fifth International Conference on Science and the Management of Protected Areas (SAMPAA V), University of Victoria, Victoria, British Columbia, Canada. The theme will be Making Ecosystem Management Work: Connecting Managers and Researchers. For more information see <a href="http://www.sampaa.org">http://www.sampaa.org</a>	<b>Sep 21-28</b>	12 <sup>th</sup> World Forestry Congress, Quebec City, Canada; <a href="http://www.wfc2003.org">http://www.wfc2003.org</a> ; Stanturf to attend.
<b>May 12-15</b>	2 <sup>nd</sup> Forest Engineering Conference, hosted by SkogForsk (The Forestry Research Institute of Sweden), Växjö, Sweden; Stanturf to present poster. <a href="http://www.skogforsk.se/fec">http://www.skogforsk.se/fec</a>	<b>Sep 28-Oct 2</b>	The Question Of Conversion of Coniferous Forests meeting, Freiburg, Germany; contact for further information: <a href="mailto:instww@uni-freiburg.de">instww@uni-freiburg.de</a>
<b>May 22-24</b>	International Conference on Economics of Sustainable Forest Management, to be held at the University of Toronto, in Toronto, Canada.	<b>Oct 2-3</b>	Enhancing the Southern Appalachian Forest Resource symposium, Kanuga Conference Center, Hendersonville, NC <a href="http://www.ces.ncsu.edu/nreos/forest/feop/symposium">http://www.ces.ncsu.edu/nreos/forest/feop/symposium</a>
<b>Jun 16-20</b>	Fourth Annual North American Forest Ecology Workshop, Oregon State University in Corvallis, OR. Abstracts due Jan 17, 2003. <a href="http://outreach.cof.orst.edu/nafew/">http://outreach.cof.orst.edu/nafew/</a>	<b>Oct 4-8</b>	3rd International Wildland Fire Conference, sponsored by the North American Forest Commission's Fire Management Working Group, Sydney, Australia.
<b>Jun 22-25</b>	57th Annual Meeting of the Forest Products Society, Doubletree Hotel, Bellevue, WA. Alex Clark will make presentation.	<b>*Oct 6-10</b>	Management Team Meeting, SRS
<b>Jun 28-Jul 2</b>	Society for Conservation Biology, Duluth, Minnesota. <a href="http://www.conservationbiology.org/2003">http://www.conservationbiology.org/2003</a>	<b>Oct 25-29</b>	Society American Foresters Annual Meeting, Buffalo, NY
		<b>Nov 2-6</b>	Soil Science Society of America annual meeting, Denver, CO



**Nov 16-20** Second International Congress On Wildland Fire Ecology And Fire Management, in conjunction with the Fifth Symposium on Fire and Forest Meteorology

**Nov 19-22** Society for Ecological Restoration 15<sup>th</sup> International Conference, Austin, TX (note new dates).  
<http://www.ser.org>

**Nov 27-30** IEA Short Rotation Bioenergy (Task 30) meeting, New Zealand and Australia

## 2004

**\*Mar 2 – 4** Southern Research Station All Scientist Meeting

**\*Jun 21-25** IUFRO Division 1-Silviculture conference, CIRAD-Foret in Montpellier, France

**Jun 27-Jul 2** First Agroforestry World Congress, Orlando, FL

**Aug** Society for Ecological Restoration 16<sup>th</sup> International Conference, Victoria, British Columbia

**Sep 3-7** European Forest Institute (EFI) annual meeting, Bangor, Wales (UK).

**Oct 31-Nov 4** Soil Science Society of America annual meeting, Seattle, WA

**Nov** Short Rotation Woody Crops Operations Working Group Biennial Meeting, Aiken, SC; dates TBA

## 2005

**Aug 8-13** IUFRO World Congress, Brisbane, Australia; Stanturf to attend; <http://www.iufro2005.com>

**Aug or Sep** Society for Ecological Restoration 17<sup>th</sup> International Conference, Zaragoza, Spain

**Nov 6-10** Soil Science Society of America annual meeting, Salt Lake City, UT



## **SRS-4104 Project Leader's Report**

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